ABSTRACT

A fuel cell system has a reformer (1), a fuel cell stack (2) for generating power by supplying reformate gas, a combustor (3) for combusting combustible gas, a passage (41) for connecting the reformer (1) and the fuel cell stack (2), a passage (42) for connecting the fuel cell stack (2) and the combustor (3), and a gas passage (4) connecting the combustor (3) and the reformer (1). When the power generation of the fuel cell stack is stopped, supply of fuel and water/air to the reformer (1) is stopped and combustion gas from the combustor (3) is circulated to the system via the gas passage (4) connecting the combustor (3) and the reformer (1) and the reformer (1).